What is claimed is:

1. A semiconductor device having a silicon-on-insulator (SOI) structure, comprising:

an insulating layer;

an insular silicon region having first conductive impurity ions formed on the insulating layer;

a source region having second conductive impurity ions formed at an end of the insular silicon region;

a drain region having second conductive impurity ions spaced apart from the source region at the other end of the insular silicon region;

an insular body region which is disposed between the source and drain regions and on which a channel is formed;

a body contact region having first conductive impurity ions and connected to the source region and the insular body region;

a conductive layer formed on the source region and the body contact region; and

a source electrode in contact with the body contact region on the source region.

2. The semiconductor device of claim 1, wherein the body contact region is formed on one side of the source region.

3. The semiconductor device of claim 1, wherein the body contact region is formed on both sides of the source region.

4. The semiconductor device of claim 1, wherein the insulating layer is an oxide layer.

5. The semiconductor device of claim 1, wherein the insular silicon region is a single crystal silicon layer.

6. The semiconductor device of claim 1, further comprising:

a gate insulating layer formed on the insular body region;

a gate conductive layer formed on the gate insulating layer;

a gate electrode electrically connected to the gate conductive layer; and

a drain electrode electrically connected to the drain region.

7. The semiconductor device of claim 1, wherein the conductive layer is a salicide layer.

8. The semiconductor device of claim 7, wherein the salicide layer is one of a cobalt salicide layer, a titanium salicide layer, and a nickel salicide layer.

9. The semiconductor device of claim 1, wherein the first conductive impurity ions are p-type and the second conductive impurity ions are n-type.

10. The semiconductor device of claim 1, wherein the first conductive impurity ions are n-type and the second conductive impurity ions are p-type.

11. A method of fabricating a semiconductor device having an SOI structure, comprising:

preparing an SOI structure where a silicon layer having first conductive impurity ions is formed on an insulating layer;

forming an isolation layer surrounding the silicon layer to form an insular silicon region on the insulating layer;

forming a gate insulating layer covering a portion of the surface of the insular silicon region;

forming a gate conductive layer on the gate insulating layer;

forming source and drain regions having second conductive impurity ions on the insular silicon region exposed by the gate conductive layer to define an insular body region between the source and drain regions;

forming a body contact region having first conductive impurity ions to be connected to one side of the source region and the insular body region;

forming a conductive layer on the source region and the body contact region; and

forming a source electrode to be connected to the conductive layer on the source region.

12. The method of claim 11, wherein the SOI structure is formed by one of an expitaxial growth method, a wafer bonding method, and a separation by implanted oxygen (SIMOX) method.

13. The method of claim 11, wherein the isolation layer is formed by one of a LOCOS isolation method and a trench isolation method.

14. The method of claim 11, wherein the conductive layer is a salicide layer.

15. The method of claim 14, wherein the salicide layer is one of a cobalt salicide layer, a titanium salicide layer, and a nickel salicide layer.

16. The method of claim 11, wherein the first conductive impurity ions are p-type and the second conductive impurity ions are n-type.

17. The method of claim 11, wherein the first conductive impurity ions are n-type and the second conductive impurity ions are p-type.